



# 4

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<110> XENOVA RESEARCH LIMITED  
Boursnell, Michael E.G.  
Inglis, Stephen C.

<120> VIRAL PREPARATIONS, VECTORS, IMMUNOGENS, AND VACCINES

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<150> US 09/033,549

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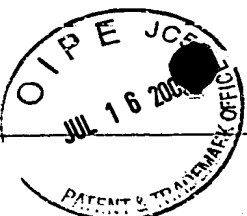
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## ABSTRACT

VIRAL PREPARATIONS, VECTORS, IMMUNOGENS, AND VACCINES

- B<sup>8</sup>
- 5 A genetically disabled mutant virus has a genome which is defective in respect of a selected gene that is essential for the reproduction of infectious new virus particles, and which carries heterologous genetic material encoding an immunomodulatory protein such as GM-CSF, IL-2, or others, such that the mutant virus can infect normal host cells and
- 10 cause expression of immunomodulatory protein, but the mutant virus cannot cause production of infectious new virus particles except when the virus infects recombinant complementing host cells expressing a gene that provides the function of the essential viral gene; the site of insertion of the heterologous genetic material encoding the
- 15 immunomodulatory protein preferably being at the site of the defect in the selected essential viral gene. Uses include prophylactic and therapeutic use in generating an immune response in a subject treated therewith; use in the preparation of a immunogen such as a vaccine for use in tumour therapy; use in the in-vitro expansion of (e.g. virus-specific) cytotoxic T cells; and therapeutic or prophylactic use in
- 20 corrective gene therapy.
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